

## **REMARKS**

The Examiner's Action mailed on September 28, 2010, has been received and its contents carefully considered. A Request for Continued Examination under 37 CFR §1.114 is filed herewith. Additionally attached to this Amendment is a Petition for a One-month Extension of Time, extending the period for response to January 28, 2011.

In this Amendment, Applicants have amended claim 1. Claim 1 is the sole independent claim pending and under consideration, and claims 1, 2, 4, 18 and 19 are pending and under consideration in the application, claims 3 and 5-17 having been previously withdrawn in response to the Restriction Requirement of November 3, 2008, although claim 3 has been deemed by the Examiner to be directed merely to a different species of the elected invention, and is thus subject to possible rejoinder. For at least the following reasons, it is submitted that this application is in condition for allowance.

Claims 1, 2, 4, 18 and 19 were rejected under 35 USC §102(b) as anticipated by *Noda et al.* (US 7,141,862 B2). This rejection is respectfully traversed.

Claim 1 as presently amended further recites that the second region has a well, that a second device formation region is defined in a well, and that the STI structure at the boundary has a trench that extends from the first region to an end portion of the well with a uniform depth.

A non-limiting example of such a structure is clearly shown in FIG. 1 as originally filed. We invite your attention to the structure at the boundary between the first region **50** and the second region **70**. The STI portion **52** extends from the first region **50** to the second region **70** and gets into an end portion of the well **76**. The STI portion **52** has a uniform depth from the first region to the end portion of the well **76**.

Claim 1 therefore recites "a second region defined on the semiconductor substrate conterminously to the first region and having a second device formation region defined in a well" wherein "the STI structure at the boundary has a trench that extends from the first region to an end portion of the well with a uniform depth".

In other words, according to the present invention, the depth of the device isolation portion at the end portion of a well in the second region is the same as the depth of the STI structure formed in the first region.

The Office Action asserts with respect to FIG. 1 of *Noda et al.*, that P-channel low voltage driving transistor region **10LVp** and N-channel low voltage driving transistor region **10LVn** collectively correspond to the claimed first region, and trench dielectric layer **22** corresponds to the claimed STI structure, whilst N-channel high breakdown voltage transistor region **10HVn** and P-channel high breakdown voltage transistor region **10HVp** collectively correspond to the claimed second region.

Further referring to FIG. 1 of *Noda et al.*, N-channel high breakdown voltage transistor **100N** in N-channel high breakdown voltage transistor region **10HVn** is formed in P-type well **32**. In addition, an N-type well **30** extends below the whole of N-channel high breakdown voltage transistor region **10HVn** and P-channel high breakdown voltage transistor region **10HVp**.

However, trench dielectric layer **22** does not extend from N-channel low voltage driving transistor region **10LVn** to either P-type well **32** or N-type well **30**. *Noda et al.* therefore fails to disclose a device isolation portion having an STI structure that extends from the first region to a well formed in a second region with a uniform depth.

*Noda et al.* therefore fails to teach or suggest that “the STI structure at the boundary has a trench that extends from the first region to an end portion of the well with a uniform depth” as recited in claim 1.

Consequently, claim 1 patentably defines over *Noda et al.* and is allowable, together with claims 2, 4, 18 and 19 dependent therefrom, and as claim 1 is generic it is respectfully requested that the species of withdrawn claim 3 be rejoined with the species of claims 2 and 4, and claim 3 allowed therewith.

It is submitted that this application is in condition for allowance. Such action and the passing of this case to issue are requested.

Should the Examiner feel that a conference would help to expedite the prosecution of this application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

Should the remittance be accidentally missing or insufficient, the Commissioner is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,



January 28, 2011

Date

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